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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,032	04/14/2004	Darin P. Haudrich	022000-001700US	7376

55132 7590 12/13/2007
WILDMAN HARROLD ALLEN & DIXON LLP
AND THE BOEING COMPANY
225 W. WACKER DR.
CHICAGO, IL 60606

EXAMINER

COUGHLAN, PETER D

ART UNIT	PAPER NUMBER
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2129

MAIL DATE	DELIVERY MODE
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12/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/825,032	Applicant(s) HAUDRICH ET AL.	
	Examiner Peter Coughlan	Art Unit 2129	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 12 November 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

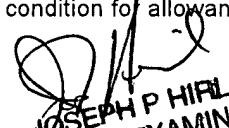
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: _____.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.


JOSEPH P HIPL
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

Continuation of 11. does NOT place the application in condition for allowance because: With the final Office Action prosecution is closed. Arguments have been considered but are not persuasive.

Regarding claims 1 and 17, the applicant questions the combination of NMAB-497 and Mehrotra is proper. The claims cite a neural network for aeroelastic analysis, NMAB uses a neural network for analysis of aging aircraft, and Mehrotra is a text book on neural networks. The Examiner sees no reason why there is a problem with the combination of NMAB and Mehrotra.

'Input parameters' of applicant is illustrated by 'materials and processes' of NMAB-497. (NMAB-497, p11:8-25) 'Neural network' of applicant is equivalent to 'neural network' of NMAB-497. (NMAB-497, p41:3 through p43:28) 'Aeroelastic analysis' of applicant is equivalent to 'aeroelasticity' of NMAB-497. (NMAB-497, p29:3 through p30:31) 'Trained neural network' of applicant is accomplished by 'back propagation' of Mehrotra. (Mehrotra, p103:1 through p104:16) 'Determine ... aeroelastic characteristics ... repair are acceptable' of applicant is disclosed by the 'certification of bonded repairs' of NMAB-497. (NMAB-497, p41:3 through p43:28)

Applicant repeats the argument that NMAB does not disclose 'input parameters.' NMAB is used in combination with Mehrotra. NMAB discloses materials and processes, maintenance and repair procedures. If a neural network is used for evaluation of maintenance and repairs, then materials used and procedures executed would be needed as input for evaluation of the repair. NMAB topic is about aging aircraft, materials and procedures are not a result of aircraft repair but are needed for aircraft repair, and are thus input information.

Applicant states that NMAB does not disclose a 'input module.' The first layer of a neural network can be viewed as a 'input module' since said layer only function is to receive inputted data.

'Produce at least one aeroelastic analysis result' of applicant is disclosed by the 'certification of bonded repairs' of NMAB-497. In order to produce a 'certification of bonded repairs', aeroelastic analysis is factor in said certification.

The description of 'aeroelasticity' being 'sources of dynamic loads on an aircraft' would be needed to determine 'certification of bonded repairs.'

Applicant states that 'certification of bonded repairs' is one of several 'unresolved issues' in aircraft repair. NMAB also states that 'repairs technologies ... ongoing or planned ... include ... bonded repair design/analysis and validation tools.' This is also another way of stating 'aeroelastic analysis ... used to determine ... the aircraft ... completed repair is acceptable for flight.'

Applicant claim that NMAB does not teach 'receiving a mass input related to a completed repair.' NMAB does teach 'weight and location on the structure.' It is true that mass and weight are not equal but weight means the gravitational pull on an object. If the gravitational pull varies from one aircraft repair location from another, then using weight as an equivalent to mass would be incorrect.

Applicant claims that Rodgers does not teach 'generate an aeroelastic flutter result.' 'Outputting the (flutter) result' of applicant is equivalent to 'processor analyses ... to determine the amount of flutter' of Rodgers. (Rodgers, C6:31-42;).